

ISAJEV, F.

CZECH

Ensilage fresh green fodder with wooden boards. P. Isajev and J. Benda (Výzkumný ústav živočišné výroby, Praha, v. Ústředí, Czechoslovakia. Sborník Českosloven. Akad. věd, 1954, 530-54 (1954). In 1950-53 experiments were carried out in ensiling fresh green fodder composed of an alfalfa-grass mixt., for a short period of time, in towers and domes made with wooden boards which can be taken apart. The nutritive values of these silages was satisfactory, and ensiling of this type is recommended for excessive fodder in spring, summer, and fall. Ensilage in the open, without boards showed great losses in nutrients. Jan Miska

ISAJEV, F.

CZECH

Summer ensiling of fresh green fodder in trough-pits with various pastes as a substitute for molasses. F. Isajev and J. Šatová (Výzkumný ústav živočišné výroby, Praha, Uhřetěves, Czech.). Sborník Českoslov. Akad. Zeměd. Věd 37B, 655-63 (1951).—Great losses were observed in silages composed of alfalfa-grass mixt. and ensiled in trough-like pits dug in waterproof clay. Pastes are regarded as a good substitute for molasses. Jan Micka

ISAJEV, P.

CZECHOSLOVAKIA / Farm Animals. Hogs.

U-6

Abs Jour : Ref Zhur - Biologiya, No 16, 1957, 72104

Author : Isajev, P.
Title : Special Silage Pigs.

Orig Pub : Socialist. Zemed., 1956, 6, No 20, 1235-1237

Abstract : Recipes, techniques of preparing silage and the limiting norms of special silage in the rations of pedigreed pigs and those for fattening are discussed.

Card : 1/1

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Isak

RUMANIA / Microbiology. Medical and Veterinary Microbiology. F-5

Abs Jour: Referat Zhur-Biol., No 6, 25 March, 1957, 22046

Author : Isak

Inst :

Title : Diagnosis and Treatment of Brucellosis.

Orig Pub: Viata med., 1956, 3, No 6, 54-61

Abstract: No abstract.

Card : 1/1

-48-

PILYUGIN, G.T.; OPANASENKO, Ye.P.; ISAK, A.M.

Synthetic dyes. Part 25: Synthesis of isomeric N-arylquinaldinium salts and their transformation to cyanine dyes. Zhur.ob.khim. 32 no.5:1398-1403 My '62. (MIRA 15:5)

1. Chernovitskiy gosudarstvennyy universitet.
(Quinaldinium compounds) (Cyanine dyes)

VOYNYA, A.; BALENTI, N.; ISAK, F.

Surgical treatment of ankylosing spondylarthritis with osteotomy of the spine. Ortop., travm. i protez. 20 no.5:7-10 My '59.

(MIRA 12:9)

1. Iz kliniki ortopedii i travmatologii (zav. - akademik prof. A.Redulesku) Instituta usovershenstvovaniya vrachey, Bukharest.
(SPONDYLITIS, ANKYLOSING, surg.
osteotomy of spine (Rus))

VOYNYA, A., kand.med.nauk; ISAK, F.

Progress in Rumanian orthopedics in the years of popular
regime. Ortop., travm. i protez. 20 no.5:60-62 My '59.
(MIRA 12:9)

(ORTHOPEDICS
in Rumania (Rus))

ISAKADZE, S. G.

Use of the Georgian ornament in nature. Vest. Tbil. bot. sada no. 69:97-104 '63. (MIRA 17:10)

Experiments in the use of the Georgian ornament in the arrangement of flower plantations. Ibid. 105-111

ISAKBA Yeva, S.Ye.

YAVORSKOVSKIY, L.I.; ISAKBA Yeva, S.Ye.

Treatment of funicular myelosis with endolumbar injection of
vitamin B12 [with summary in French]. Zhur.nevr. i psikh. 57 no.2:
187-190 '57. (MLRA 10:6)

1. Rishskaya respublikanskaya klinicheskaya bol'nitsa (glavnyy
vrach - kandidat meditsinskikh nauk F.F.Grigorash).
(MYELOSIS, ther.

funicular, endolumbar inject. of vitamin B12)

(VITAMIN B12, ther. use

myelosis, funicular, endolumbar inject.)

AKHMEDZHANOV, M.A.; MIRKAMILOV, A.M.; ISAKDZHANOV, B.I.

Remarks on the Paleozoic stratigraphic scale of the Chatkal
subzone. Uzb.geol.zhur. 6 no.3:77-80 '62. (MIRA 15:6)

1. Institut geologii AN UzSSR.
(Soviet Central Asia—Geology, Stratigraphic)

AKHMEDZHANOV, M.A.; BORISOV, O.M.; ISAKDZHANOV, B.I.

Age of the gabbro-diorite-porphyrte intrusion in the Chatkal
River basin. Dokl. AN Uz. SSR 21 no.9:37-40 '64.

(MIRA 19:1)

1. Institut geologii i geofiziki imeni Abdullayeva AN UzSSR.

TOPCHIEV, A.V.; MUSAYEV, I.A.; ISAKHAKOVA, E.Kh.; SARDANASHVILI, N.M.;
KISLINSKIY, A.N.; GAL'PERN, G.D.

Chemical composition of gasolines obtained from the cracking of
naphenic feed stocks. Report No.2: Individual hydrocarbon compo-
sition of cracking gasolines from Surakhan selective crudes.
Izv. AN SSSR, Otd. khim. nauk no.2:302-306 F '61. (MIRA 14:2)

1. Institut neftekhimicheskogo sinteza AN SSSR.
(Gasoline) (Petroleum products)

TOPCHIBASHEV, I.M.; ISAKHANOV, A.G.

Control of convulsions in tetanus with analgesin. Khirurgiia,
Moskva no.4:17-19 Apr 1951. (CLML 20:9)

1. Of the Faculty Surgical Clinic, Azerbaydzhani Medical Institute
(Head of Staff--Active Member of the Academy of Sciences Azer-
baydzhani SSR; Corresponding Member of the Academy of Medical
Sciences USSR Prof. M.A. Topchibashev).

ISAKHANOV, A.G.

Fate of swallowed foreign objects in the gastrointestinal tract
of children. Azerb. med. zhurn. no.2:98-99 F '59. (MIRA 12:3)

1. Iz 2-y ob'yedinennoy gorodskoy klinicheskoy bol'nitsy imeni
Shaumyana (glvvrach - Sh. Kasumov).
(STOMACH--FOREIGN BODIES)

ISAKHANOV, A.G.

Two cases of acute torsion of the stomach. Sov.med. 23
no.6:127-129 Je '59. (MIRA 12:9)

1. Is 1-y fakul'tetskoy khirurgicheskoy kliniki (sav. -
daystvitel'nyy chlen AN Azerbaydzhanskoy SSR, chlen-korrespon-
dent AMN SSSR prof.N.A.Topchibashev) Azerbaydzhanskogo meditsin-
skogo instituta.

(STOMACH dis.)



ISAKHANOV, A.G.

Analysis of the mortality from acute intestinal obstruction
and the ways for its reduction. Sov. med. 25 no.4:32-37 Ap
'62. (MIRA 15:6)

1. Iz Gorodskoy klinicheskoy ob'yedinennoy bol'nitsy No.2
imeni Shaumyana (glavnyy vrach Sh.S. Kasumov), Baku.
(INTESTINES—OBSTRUCTIONS)

ISAKHANOV, A.G.

Postoperative lung complications in acute intestinal obstruction.
Sov.med. 26 no.6:56-60 Je '62. (MIRA 15:11)

1. Iz 2-y Bakinskoy gorodskoy klinicheskoy ob'yedinennoy bol'nitsy
imeni S.Shaumyana (glavnyy vrach Sh.S.Kasumov).
(INTESTINES—OBSTRUCTIONS)
(LUNGS—DISEASES)

ISAKHANOV, A.G.

Causes of peritonitis in acute intestinal obstruction, its prevention and treatment. Sov.med. 26 no.7:63-66 J1 '62.

(MIRA 15:11)

1. Iz Gorodskoy klinicheskoy bol'nitsy No.2 imeni S.Shaumyana
(glavnyy vrach Sh.S.Kasumov), Baku.
(INTESTINES—OBSTRUCTIONS) (PERITONITIS)

ISAKHANOV, G. V.

AUTHORS: Grigorenko, Ya. M. and Isakhanov, G.V. 24-2-27/28

TITLE: Scientific Conference on the strength of elements of turbo-machinery at elevated temperatures. (Nauchnoye soveshchaniye po voprosam prochnosti elementov turbomashin pri vysokikh temperaturakh).

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1958, No.2, pp. 165-167 (USSR).

ABSTRACT: A scientific conference was held in Kiev between September 28 and October 2, 1957 on problems of strength of elements of turbo-machinery at elevated temperatures which was convened by the Institute of Metallo-Ceramics and Special Alloys (Institut Metallokeramiki i Spetsstplavov), the Institute of Structural Mechanics (Institut Stroitel'noy Mekhaniki) and the Institute of Thermal Power (Institut Teploenergetiki Akademii Nauk Ukrainskoy SSR) of the Ac.Sc., Ukrainian SSSR. About 200 people participated representing scientific and teaching establishments and works of Moscow, Leningrad, Kiev, Kharkov, Minsk, Kuybyshev, etc. In his opening address, Corresponding Member of the Ac.Sc. Ukraine I. N. Frantsevich pointed out the importance of the problem of high temperature strength of components of turbo-machinery.

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Scientific Conference on the strength of elements of turbo-machinery at elevated temperatures.

A number of papers were read relating to the theory of heat conductivity and thermo-elasticity. In his paper "Investigation of the temperature fields in turbine rotors" Ye. P. Dyben reported on the theoretical and experimental investigations of the steady state and the non-steady state thermo-conductivity in turbine rotors of various designs including investigations on concrete specimens of rotors produced by the Kirov and Neva Works, the "Ekonomayzer" Works and others, carried out at the Institute of Thermal Power, Ukrainian Ac.Sc. In studying the temperature fields they used the method of laboratory investigation of non-steady state thermal conductivity by means of high frequency heating, the method of electro-thermal analogy by means of "ЭРА А" equipment etc. They obtained a solution of the problem of non-steady state thermal conductivity of a hollow cylinder of finite length with a relatively general law of the changes of the temperature and the heat transfer coefficients. The Institute, jointly with the Experimental Gas Turbine Construction Works, developed a method of

Card 2/9 cooling the discs by blowing cooling air through the

mechanisms. Furthermore, a method was developed of calculating a rotor of a two-stage aviation gas turbine

Card 3/9 considering it as a non-uniformly heated and rotating

24-2-27/28

Scientific conference on the strength of elements of turbo-machinery at elevated temperatures.

system in which the following elements operate jointly: discs, shells and ring-shaped rods.

In his paper "Certain Methods of Solving the Axis-Symmetrical Problem of the Theory of Elasticity Taking Into Consideration Mass Forces and the Temperature" E. S. Umanskiy elucidated an approximate method of calculation of the stress state.

The paper of V. I. Danilovskiy (Mechanics Institute, Ac.Sc. USSR) was devoted to calculating the temperature fields in thin shells.

The paper of A. I. Veynik (Power Institute, Ac.Sc. Byelo-Russia) was devoted to an approximate method of solving the problem of thermo-conductivity in solid bodies.

The paper "Temperature Stresses in Thin Walled Structures" by I. A. Birger and B. F. Shor dealt with the investigations carried out by TsIAM on the thermal stresses in rods, taking into consideration variable elasticity parameters and also with the stress state of thin walled naturally twisted rods which are subjected to the effect of external forces and non-uniform heating.

In the paper "Temperature Stresses in Elements of Gas

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Turbines Under Conditions of Non-steady State Thermal

Scientific conference on the strength of elements of turbo-
machinery at elevated temperatures. 24-2-27/28

Regimes" A. G. Kostyuk (MEI) considered the method of approximate solution of the problem of the non-steady state temperature field in which the component is considered as a semi-infinite body during the initial instant of heating.

In his paper "Temperature Stresses in the Runner Blades and Discs" N. N. Malinin (MVTU) described engineering methods of calculating the thermal stresses in discs with variable elasticity parameters. The papers of Ya. S. Podstrigach (Institute of Mechanical Engineering and Automation, Ukrainian Ac.Sc., L'vov) and of L. G. Fridman (Kuybyshev) dealt with investigations of the temperature stresses in thin walled structures particularly in bodies of aviation engines. P. S. Kuratov (TsKTI) and Ye. M. Molchanov (VTI) reported on complex investigations of the temperature fields, the stress state and the thermal fatigue of the rotors of definite turbines. In his paper "Experimental Investigation of the Temperature Stresses in Fully Forged Rotors" G. A. Rayer reported on experimental investigations carried out at the Neva

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Scientific Conference on the strength of elements of turbo-^{24-2-27/28}
machinery at elevated temperatures.

Engineering Works imeni Lenin (Leningrad).
The representative of the Leningrad Metal Works,
Engineer I. N. Shibalov conveyed information on the tests
of equipment for heating individual elements of the
BT-25-4 turbine during starting.

The second part of the conference was devoted to
problems of the constructional strength of elements
on turbo-machinery at elevated temperatures.
In his paper "Work of the Institute of Metalloceramics
and Special Alloys, Ukrainian Ac.Sc. in the Field of
High Temperature Strength" G. S. Pisarenko described
certain results obtained by the team of the Strength
Division of the Institute as regards the development of
new methods and test equipment for studying the mechanical
characteristics of high temperature materials at
temperatures up to 1500°C, for high temperature static
and dynamic tests of metalloceramic materials and of
components and also certain results of investigations
relating to dissipation of energy in heat resistant
materials at normal and at elevated temperatures.
The paper of G. S. Brokhin, A. B. Platov and A.I. Baranov

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Scientific Conference on the strength of elements of turbo-
machinery at elevated temperatures. 24-2-27/28

duration disruption/^{tests} the character of the disruption
of the projections provided for fixing the discs and
the character is described of the material of the disc
before and after fracture. In his paper "Fatigue
Testing of Turbine Blades and Materials at Normal and
at Elevated Temperatures" I. I. Papchenko (TsKTI) dealt
with the method developed by TsKTI for generating blade
oscillations permitting creation of loads of various
magnitudes and frequencies at the natural oscillation
frequencies, giving some of the results of the investi-
gations.

In her paper "On the Evaluation of the Long Duration
Strength of Components of Gas Turbines Taking Into
Consideration Variable Stresses and Temperatures"
Ye. I. Rusanova (NII) considered the conditions of
disruption and the possibility of reducing the problem
to the usually applied evaluation, assuming a constant
temperature and constant stresses.

The paper of M. Yu. Bal'shin (Institute of Metallurgy,
Ac.Sc. USSR imeni A. A. Baykov) was devoted to
investigating the strength, the mechanism of sintering
and the creep in relation to the thermal properties of

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ISAKHANOV, G.V.; GRIGORUKO, Ya.M. [Hryhorenko, I.A.M.]

Scientific conference on the investigation of the strength of
turbomachine workpieces at high temperatures. Prikl. mekh. 4
no.1:115-117 '58. (MIRA 11:4)

(Turbomachines)

15(2)

05287

SOV/170-59-7-18/20

AUTHOR: Isakhanov, G.V.

TITLE: An Experimental Investigation of Relaxation of Stress on Metal Ceramic Materials

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, 1959, Nr 7, pp 102 - 105 (USSR)

ABSTRACT: In view of increasing importance of metal ceramic materials as heat-resistant materials, the author investigated three polydispersed types of them on a silicon carbide base (with different composition of components) by the method of relaxation stresses proposed by I.A. Odina (Refs 1,2). The relaxation process was studied on samples having a shape of non-closed ring (Figure 1). The coefficient A was found to be equal to 0.000552, i.e., slightly less than for cast materials for which $A = 0.000583 \text{ mm}^{-1}$. The tests were carried out on an installation of the IP-5 type devised by TsNIITMASH at a temperature of 980°C and within the range of initial stresses from 3.6 to 4.9 kg/mm^2 . The results of the tests are shown in Figure 2. A comparison of relaxation properties of metal ceramic materials on silicon carbide base with those of steel of the EI-10 grade shows (Table 1) that the former possess

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POPKOV, V.G., ISAKHANOV, G.V.

Investigating initial stress relation and the strength of
composite silicon carbide - graphite specimens. Vop. por.
met. i prochn. mat. no.8:116-121 '60. (MIRA 13:8)
(Laminated metals--Testing)
(Ceramic metals--Testing)

ISAKHANOV, G. V.

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PHASE I BOOK EXPLOITATION

SOV/6342

Pisarenko, Georgiy Stepanovich, Valeriy Trofimovich Troshchenko, Vsevolod Georgiyevich Timoshenko, Vasiliy Aleksandrovich Kuz'menko, Georgiy Vakhtangovich Isakhanov, Georgiy Nikolayevich Tret'yachenko, Boris Alekseyevich Gryaznov, Nikolay Vasil'yevich Novikov, Vasiliy Nikitich Rudenko, and Rufina Gerasimovna Shumilova

Prochnost' metallokeramicheskikh materialov i splavov pri normal'nykh i vysokikh temperaturakh (Strength of Sintered Materials and Alloys at Room and High Temperatures) Kiyev, Izd-vo Akademii nauk UkrSSR, 1962. 274 p. Errata slip inserted. 2400 copies printed.

Sponsoring Agency: Akademiya nauk Ukrainskoy SSR. Institut metallokeramiki i spetsial'nykh splavov.

Resp. Ed.: G. S. Pisarenko, Corresponding Member, Academy of Sciences USSR; Ed.: I. V. Lebedev; Tech. Ed.: Yu. B. Dakhno.

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1/2

Strength of Sintered Materials (Cont.)

SOV/6342

PURPOSE: The book is intended for engineers, scientific research workers, aspirants, and students concerned with problems of the strength of sintered materials and structural parts.

COVERAGE: The book reviews the results of studying the strength, ductility, and elasticity of materials and structural parts produced by powder-metallurgy methods and presents brief information on these methods. Particular attention is given to methods of experimental investigation of physical and mechanical characteristics of heat-resistant sintered materials with specific properties, and to the description of a number of testing units developed for these investigations. Some problems of the theory of the strength of brittle sintered materials and high-porosity ductile materials are discussed. Laws governing changes in characteristics of strength and elasticity under the effect of various factors are outlined. The appendix includes reference tables with data on the basic mechanical characteristics of a number of sintered materials. The assistance of members of the Powder Metallurgy Institute V. I. Kovpak, Yu. A. Kashtalyan, L. V. Kravchuk, A. P. Yakovlev, V. K. Kharchenko, V. K. Kuz'menko, and V. A. Chebotarev is acknowledged. There are 141 references, mostly Soviet.

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ISAKHANOV, G.V., Izob.; LYASHENKO, K.A., Izob.; LITVINOV, I.A., Izob.

High-temperature radiant-heating furnace. Mashinostroenie no.11
73-74 Ja-P '65. (MIRA 1814)

Koshchey, G.V., LEZHENKO, B.Ya.

Inertialess high temperature furnace for mechanical testing.
Porosh. mat. 5 no.9:99-103 S '65. (MIRA 18:9)

1. Institut problem materialovedeniya AN UkrSSR.

L 3568-66 EWT(m)/EWP(w)/EPF(c)/EWP(f)/T WW/EM/WM
 ACCESSION NR: AP5024821

UR/0032/65/031/010/1248/1249
 620.17 : 678.5.06

AUTHOR: Lyashenko, B. A.; Isakhanov, G. V.

TITLE: Determining the momentary characteristics of strength and tendency to de-
 formation of reinforced plastics

SOURCE: Zavodskaya laboratoriya, v. 31, no. 10, 1965, 1248-1249

TOPIC TAGS: electronic measurement, plastic strength, synthetic material

ABSTRACT: A method is described for determining the momentary characteristics of strength and rigidity in plastics under unilateral surface loading conditions. High rates of loading and deformation are used to minimize the registered time of deformation and destruction of the specimen and obtain indices of strength and rigidity which correspond most exactly to their momentary values. The time necessary for deformation and destruction of the specimen is short enough so that variations in the geometry and size of the sample may be disregarded as well as changes in the elastic constants through the cross section. A deformation rate of 15 m/sec is recommended for eliminating the effect of structural and phase transformations which

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ACC NR: ~~74-66~~ EWP(a)/EWT(m)/EWP(v)/T/EWP(i)/ETC(m)-6/EWA(l) IJP(c) IG/WJ/
AT6008654 (A) GS/RM/WH SOURCE CODE: UR/0000/65/000/000/0106/0112

AUTHORS: Lyashenko, B. A. (Kiev); Pisarenko, G. S. (Academician AN UkrSSR) (Kiev); 4/1
Isakhanov, G. V. (Kiev) 40
3+1

ORG: none

TITLE: On the determining of the mechanical properties of laminated plastics in conditions of one-sided surface heating 5

SOURCE: Vsesoyuznoye soveshchaniye po voprosam staticheskoy i dinamicheskoy prochnosti materialov i konstruktivnykh elementov pri vysokikh i nizkikh temperaturakh, 3d. Termoprochnost' materialov i konstruktivnykh elementov (Thermal strength of materials and construction elements); materialy soveshchaniya. Kiev, Naukova dumka, 1965, 106-112

TOPIC TAGS: glass textolite, glass product, material testing, thermal property, heat stability/ KAST glass textolite

ABSTRACT: The results of testing the mechanical properties of glass textolite of type KAST under surface heating are presented. The tests were conducted in conditions of pure shear on specimens of dimensions 11 x 11 x 150 mm. Heat currents used varied in the range of 840--2100 kv/m². One-sided surface heating was performed by generating an electrical current through the carbonized layer of the tested glass plastic according to a method developed in the Institute of Problems of Material Behavior, AN UkrSSR (Institut problem materialovedeniya AN UkrSSR), and is described by B. A. Lyashenko and

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L 22974-66

ACC NR: AT6008654

G. V. Isakhanov (sb. Voprosy vysokotemperaturnoy prochnosti v mashinostroyenii, K., Izd-vo AN UkrSSR, 1963). Factors identified as affecting the bearing capacity of a specimen at a given instant are: 1) the depth of the zone of material with the reference (base) properties, 2) the variation of the elastic constants in the zone of the base material under increasing temperature in that zone, 3) the strength of zone of pyrolysis and of the carbonized zone, their dimensions and position relative to the neutral axis under shear, 4) thermal stress in the pyrolysis zone and in the carbonized layers, and 5) stress in the carbonized zone caused by internal pressure from gaseous products of pyrolysis. Plots are given showing the experimental results; for example, Fig. 1 shows the variation of bearing capacity with heating duration for parametric values of individual heat currents.

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L 22974-66

ACC NR: AT6008654

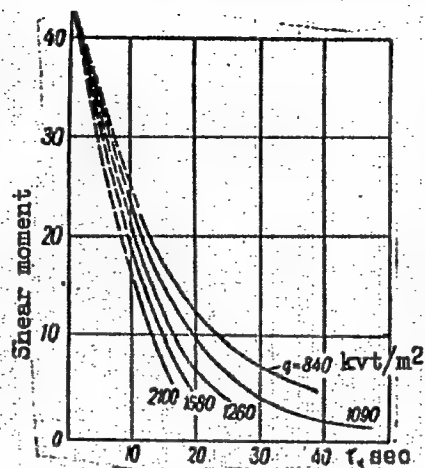


Fig. 1. The variation of bearing capacity with individual heat currents and duration of heating.

Kast

Orig. art. has: 5 figures and 7 equations.

SUB CODE: 11/ SUBM DATE: 19Aug65/ ORIG REF: 002/ OTH REF: 001

Card 3/3

L 27711-66 EWP(e)/EWT(m) WH

ACC NR: AP6015351 (N)

SOURCE: CODE: UR/0226/66/000/005/0041/0048

AUTHOR: Beloivan, A. F.; Isakhanov, G. V.; Radomysel'skiy, I. D.; Shcherban, N. I.

ORG: Institute of Material Study, AN UkrSSR (Institut problem materialovedeniya AN UkrSSR)

TITLE: Mechanical properties of sintered metal-glass material 15

SOURCE: Poroshkovaya metallurgiya, no. 5, 1966, 41-48

TOPIC TAGS: composite material, metal glass material, sintered material, material property

ABSTRACT: The mechanical properties of sintered metal-glass materials made of PZh-2M (GOST9849-61) iron powder mixed with 0.5, 1.0, 2.0, 3.0, 5.0, 7.0, or 12% glass have been investigated. Green compacts obtained under 52 kg/mm² pressure were sintered at 600—1200C for 1—2 hr. The strength of sintered material was found to depend primarily on the strength of the metal framework. However, glass intensifies the sintering and shrinkage, increases the density, and thus improves the mechanical properties of the metal-glass composites. The strength of the metal framework depends upon the diffusion of particles forming the framework. An increase in the sintering temperature up to 850C intensifies the shrinkage and, as a result, the material strength. At 900—1050C, the shrinkage and the strength decrease to a

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ISAKHANOV, M. P.

"The Organization and Activity of BG 3667 During the War Period of 1941-1945
in the Deep Rear (Uzbek SSR)." Sub 8 Jul 47, Central Inst for the Advanced
Training of Physicians

Dissertations presented for degrees in science and engineering in
Moscow in 1947

SO: Sum No. 457, 18 Apr 55

ROMANOV, Ya.M., dotsent; ISAKHANOV, M.P., dotsent

Organization and some results of the aid to the public health organs
from the staff of Ivanovo Medical Institute. Zdrav. Ros. Feder. 5
no.12:23-26 D '61. (MIRA 15:1)

1. Iz Ivanovskogo meditsinskogo instituta (rektor - dotsent Ya.M.
Romanov).

(IVANOV PROVINCE—PUBLIC HEALTH)

ISAKHANOV, P.M.; LAPIN, M.D.

Some blood coagulation factors in cancer of the stomach and esophagus. Khirurgiia 39 no.8:88-92 Ag '63. (MIRA 17:6)

1. Iz Instituta serdechno-sosudistoy khirurgii (direktor - prof. S.A. Kolesnikov; nauchnyy rukovoditel' - akad. A.N. Bakulev) AMN SSSR i Moskovskogo oblastnogo onkologicheskogo dispansera (glavnyy vrach P.M. Isakhanov). Nauchnyy rukovoditel' raboty - prof. YuYe. Berezov.

ISAKHANOV, P.M.

Cancer of the stomach and esophagus; materials from the province
oncological dispensary in Moscow. Sov. med. 27 no.2:49-54 F '64.
(MIRA 17:10)

1. Moskovskiy oblastnoy onkologicheskoy dispenser (glavnyy vrach
P.M. Isakhanov; nauchnyy rukovoditel' raboty - doktor med. nauk
Yu.Ye. Berezov).

ISAKHANOV, R.S.

One class of singular integral equations. Soob. AN Gruz. SSR 20
no.1:9-12 Ja '58. (MIRA 11:6)

1. Tbilisskiy matematicheskiy institut im. A.M. Rasmadze AN GruzSSR.
Predstavleno chlenom-korrespondentom AN N.P. Vekua.
(Integral equations)

ISAKHANOV, R.S.

Differential boundary problem of linear conjugation and its use in theory of integrodifferential equations. Soob. AN Gruz. SSR 20 no.6: 659-666 Je '58. (MIRA 11:10)

1. AN Gruzinskoy SSR, Tbilisskiy matematicheskiy institut im. A.M. Razmadze. Predstavleno chlenom-korrespondentem Akademii N.P. Vekua. (Integral equations)

ISAKHANOV, R.S.

Some differential boundary problems in the theory of analytic functions. Soob. AN Gruz. SSR 21 no.1:11-18 J1 '58.

(MIRA 11:10)

1. AN GruzSSR, Tbilisskiy matematicheskiy institut im. A.M. Razmadze. Predstavleno chlenom-korrespondentom Akademii N.P.Vekua.
(Functions, Analytic)

16.4500

S/044/62/000/006/034/127
B158/B112

AUTHORS: Vekua, N. P., Isakhsnov, R. S.
TITLE: One class of singular integral equations effectively solvable
PERIODICAL: Referativnyy zhurnal. Matematika, no. 6, 1962, 77,
abstract 6B324 (Sobshch. AN GruzSSR, v. 23, no. 3, 1959,
257 - 264)

TEXT: A linear singular equation

$$a(t_0)\varphi(t_0) + \frac{b(t_0)}{\pi i} \sum_{p=0}^{n-1} \int_{L_0} \frac{\varphi(t)}{t - \omega_p(t_0)} dt + \sum_{q=1}^m A_q(t_0) \int_{L_0} B_q(t) \varphi(t) dt = f(t_0), \quad (1)$$

where L_0 is a simple closed smooth contour on the plane of a complex variable $\zeta = x + iy$, $a(t_0)$, $b(t_0)$, $A_q(t_0)$, $B_q(t_0)$, ($q = 1, 2, \dots, m$), $f(t_0)$ are given functions from the Hölder class, $\varphi(t)$ is an unknown function also from the Hölder class, $\omega_0(t_0) \equiv t_0$, $\omega_1(t_0), \dots, \omega_{n-1}(t_0)$ are

Card 1/2

16.4500

32489
S/044/61/000/011/006/049
C111/C444

AUTHOR: Isakhanov, R. S.
TITLE: On a class of differential boundary value problems
PERIODICAL: Referativnyi zhurnal, Matematika, no. 11, 1961, 14,
abstract 11B55 (Sobolevskii, A. M. UssR, 1960, 25, no. 5,
517 - 524)

TEXT: In a simply connected domain bounded by a single smooth
closed curve L which divides the plane into the domains D^+ and D^- ,
two boundary value problems are investigated.
For the boundary value problem

$$\Phi(t) + \sum_{k=0}^n [A_k(t) \Phi^{(k)}(t) + \frac{1}{\pi i} \int_L B_k(t, \tau) \Phi^+(\tau) d\tau] = g(t) \quad (1)$$

theorem 1 is proved. There exists a non-negative integer r such that
for every integer $l \geq 0$ and arbitrary constants c_0, \dots, c_{r+1} the bound-
ary value problem (1) for an arbitrary right hand possesses a solu-
tion with the principal part at infinity.
For the boundary value problem

Card 1/2

164500

S/020/60/132/02/06/067

AUTHOR: Isakhanov, R. S.

TITLE: A Class of Singular Integro-differential Equations

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 132, No. 2, pp. 264-267

TEXT: Let L be a closed smooth contour of the Lyapunov type in the z -plane; S^+ the finite domain bounded by L ; S^- the exterior domain. The point $z = 0$ is assumed to belong to S^+ . Let

$$(1) K\varphi \equiv \sum_{r=0}^m \left[A_r(t_0) \varphi^{(r)}(t_0) + \frac{1}{\pi i} \int_L \frac{K_r(t_0, t) \varphi^{(r)}(t) dt}{t - t_0} \right] = f(t_0)$$

be considered, where $A_r(t)$, $K_r(t_0, t)$, $f(t)$ are given functions on L , $A_m(t_0) \pm K_m(t_0, t_0)$ does not vanish on L .

The equation

$$(11) \quad K'\varphi \equiv \sum_{r=0}^m (-1)^r \left\{ [A_r(t) \varphi(t)]^{(r)} - \frac{1}{\pi i} \int_L \frac{\left(\frac{\partial}{\partial t} + \frac{\partial}{\partial t_1}\right)^r K_r(t, t_1) \varphi(t_1)}{t_1 - t} dt_1 \right\} = 0$$

Card 1/2

ISAKHANOV, R.S.

Some boundary value problems of linear conjugation. Trudy Mat.
inst. AN Gruz. SSR 28:73-84 '62. (MIRA 16:8)

(Boundary value problems)
(Functions of complex variables)

GABRIYEL'YAN, A.A.; ISAKHANYAN, D.P.; ADAMYAN, A.I.; BAL'YAN, S.P.

Stratigraphy of upper Tertiary volcanogenous strata of the
Karabakh Upland. Nauch.trudy Brev.un. 52:3-23 '55. (MLRA 9:9)

1. Kafedra istoricheskoy geologii i paleontologii.
(Karabakh Upland--Geology, Stratigraphic)

ISAKHANYAN, D.P.

Age of the Goris horizon in the western Karabakh volcanic upland.
Nauch.trudy Brev.un. 52:25-33 '55. (MLBA 9:9)

1. Kafedra obshchey geologii.
(Karabakh Upland--Geology, Stratigraphic)

ISAKHANYAN, G., inzh.

Eliminate shortcomings in the organization of construction and
erection work in mountain regions of Armenia. Prom.Arm. 6
no.2:24-26 F '63. (MIRA 16:5)
(Armenia--Construction industry--Management)

1. ISAKHANYAN, N.T.; KOIGYLIN, YE. I.; KUKANIN, I.B.; OLOPTASHNY, N.F.;
PROSYANKI, G.V.; PARTOLOV, L.I.;

2. USSR (600)

4. Sand, Foundry

7. Repeated use of core mixtures., Lit.proiz., No. 10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

Isak Hanyan, N.T.

PANTALOV, L.I., professor, doktor; KUMANIN, I.B., dotsent, kandidat
tekhnicheskikh nauk; ISAKHANYAN, N.T., dotsent, kandidat
tekhnicheskikh nauk; PIKMAN, R.G., inzhener.

Slag inclusions in machine casting. Sbor.Inst.stali no.32:202-235
'54. (MLRA 10:5)

Kafedra liteynogo proizvodstva.
(Die casting--Quality control)

ISAKHANYAN, N.T., dotsent, kandidat tekhnicheskikh nauk.

Using unconditioned molding sands. Sbor.Inst.stali no.32:257-266
'54. (MLRA 10:5)

1.Kafedra liteynogo proizvodstva.
(Sand, Foundry)

ISAKHANYAN, N. T.; TOKAREV, A. I.; GONCHAROV, P. A.

Effect of the composition of molding sand mixtures on the
probability of the formation of shrinkage cavities. Izv. vys.
ucheb.zav.; chern.met.7 no. 5:147-153 '64. (MIRA 17:5)

1. Moskovskiy institut stali i splavov.

IS. ISHANYAN, S. Sh.

"Therapy of Inflammations of the Kidneys and Urinary Tracts of Cattle
With a Preparation of 'Nshamin.'" Cand Vet Sci, Yerevan Zooveterinary Inst,
Min Higher Education USSR, Yerevan, 1954. (KL, No 9, Feb 55)

SO: Sum. No. 631, 26 Aug 55 - Survey of Scientific and Technical Dissertations
Defended at USSR Higher Educational Institutions (14)

USSR/Diseases of Farm Animals. Non-Contagious Diseases

R-2

Abs Jour : Ref Zhur-Biol., No 18, 1958, 83567

Author : ~~Isakhangyan, S. Sh.~~

Institute : Yerevan Zootekhnical Veterinary Institute

Title : Treating Renal and Urinary Tract Inflammations in Large Horned Cattle with Nahamin Preparations.

Orig Pub : Tr. Yerevansk. zootekhn. vet. in-ta, 1957, vyp. 21, 209-219

Abstract : It is reported that good therapeutic results were obtained with a domestic preparation called Nahamin. (a synthetic drug whose empiric formula is $C_{11}H_{10}O_2N_2$). The preparation was intravenously injected in doses of 0.02-0.03 gr/kg in the form of a 10 percent water solution.

Card 1/1

USSR/Diseases of Farm Animals. Noninfectious
Diseases.

R-2

Abs Jour : Ref Zhur-Biol., No 20, 1958, 92723

Author : Movsesyan, T. B., Karapetyan, A. A.,
Isakhanyan, S. Sh.

Inst : Yerevan Zootechnical Veterinary Institute.

Title : Pathomorphological Changes in the Kidneys
of Bovines in the Course of Experimentally
Induced Pyonephritis Before and After Treat-
ment with "Nshamin".

Orig Pub : Tr. Yerevansk. zootekhn. vet. in-ta, 1957,
vyp. 21, 221-229

Abstract : The autopsy on the 4-5th day after artifi-
cially induced pyonephritis in calves dis-
closes the following: increase in the size

Card : 1/3

ISAKHANYAN, U. Sh.

Country : USSR

M

Category : CULTIVATED PLANTS, FRUITS, Berries.

Abs. Jour. : REF ZHUR-BIOL., 21, 1958, NO-96157

Author : Ter-Zekharyan, P.K.; Isakhanyan, U.Sh.

Institut. : Inst. of Viticulture, Wine-Making and Horticulture

Title : Methods of Irrigating Vineyards in Hedgerow Planting

Orig. Pub. : Tr. In-ta vinogradarstva, vinodeliya i plodovodstva ArmSSR, 1957, vyp. 3, 213-233

Abstract : The Armenian Agricultural Institute jointly with the Institute of Viticulture, Wine-Making and Horticulture of Armenia conducted experiments in 1955 to discover the most rational method of irrigating vineyards planted in hedgerows. The experiments were conducted on Makhali variety growing on light-brown soils according to the arrangements: 1) irrigation by continuous flooding; 2) irrigating along furrows: a) along a single

* Armenian SSR

Card: 1/3

Category : CULTIVATED PLANTS, FRUITS

Abs. Jour. : REF ZHUR-BIOL., 21, 1958, NO-96157

ISAKHANYAN, J. S.

COUNTRY : USSR
 CATEGORY : Cultivated Plants. Fruits. Berries. E
 ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104903
 AUTHOR : Ter-Sakanyan, P. K., Iskanyan, U. Sh., Savtjan, M. O.
 INST. : Institute of Viticulture, wine making and fruit growing,*)
 TITLE : Schedule of Vineyard Irrigation on the Lands of Volcanic
 Foothills of Armenian SSR.
 ORIG. PUB. : Tr. In-ta vinogradarstva, vinodeliya i plodovolstv.
 armSSR, 1957, vyp. 3, 195-211
 ABSTRACT : The schedule of the irrigation of fruit-bearing vineyards
 (Rakuli variety) under production conditions, has been
 studied at the Armenian Agricultural Institute and the
 Institute of Viticulture, wine making and fruit growing
 since 1954. In the conditions of light-brown soils
 ("kirs"), in order to maintain the optimum moisture con-
 tent of the soil, it is necessary to give the fruit-

*) Armenian S.S.R.

CARD:1/3

122

ISAKIN, A.F.

ISAKIN, A.F.

Novocaine block in the treatment of neurogenic disorders of urination.
Sov.med. 19 no.1:50-52 Ja '55. (MLRA 8:4)

(PROCAINE, therapeutic use.

urination disord., nerve block)

(ANESTHESIA, REGIONAL, in various diseases.

procaine nerve block in urination disord.)

(URINATION DISORDERS, therapy.

procaine nerve block)

ISAKIN M.P.

USSR / Farm Animals. Small Horned Stock

Q-2

Abs Jour: Ref Zhur-Biol., No 23, 1958, 105647.

Author : Il'yin, N. I., Isakin, M. P.

Inst : Not given.

Title : Experience in the Organization of Fine-Wool
Sheep Breeding in Transbaikalia.

Orig Pub: Ovtsevodstvo, 1958, No 3, 8-16.

Abstract: In the course of different years, the rams of the Fine-wool and Prococo breeds were brought into the Sovkhoz imeni Karl Marx of the Chitinskaya Oblast. The hybrids derived from absorption crossbreeding with Coarse-wool ewes and the rams themselves were poorly acclimatized and had a poor productivity. During the last years, the rams of the Groznyy breed were imported, and mated to ewes of the Altay origin for a single

ISAKOV, A.

In workshops of the Ural Heavy Machinery Plant. Obshchestv. pit.
no.9:7 S '58. (MIRA 11:10)

1. Direktor stolovoy No.3 Ural'skogo zavoda tyazhelogo mashinostroye-
niya.

(Sverdlovsk restaurants, lunchrooms, etc.)

ISAKOV, A.

One day. Grashd.av. 18 no.1:5-6 Ja '61.

(MIRA 14:3)

1. Rukovoditel' poletov Sverdlovskogo aeroporta.
(Sverdlovsk--Airports--Management)

DEMENT'YEVA, M.I., kand. sel'skokhoz. nauk; IDRISOV, S.; ISAKOV, A.
entomolog; GUREVICH, Kh.S., sadovod-lyubitel'

For the amateur fruit grower. Zashch. rast. ot vred. i bol.
9 no.2:40-41 '64. (MIRA 17:6)

1. Glavnyy agronom entsukul'skogo proizvodstvennogo uprav-
leniya Dagestanskoy SSR (for Idrisov). 2. Entsukul'skoye
proizvodstvennoye upravleniye Dagestanskoy SSR (for Isakov).

ISAKOV, A.A. (Kemerovskaya oblast'); ZHURGARYEV, Amangel'dy (Dzhambul'skaya obl., KazSSR); VLADIMIROV, A. (Asbest); FRIMAN, L.I. (Yaroslavl'); KILIMNIK, Ya.Ye. (Vinnitsa); TEREKHOV, I.A. (Skopin); AKDAULETOV, N.A. (pos.Mertuk. KazSSR); ZAKHARKIN, V.Ye. (pos.Rudtsev, Tul'skaya oblast'); SHESTOPAL, G.A. (Moskva); KOTIY, O.A. (Yaroslavl'); GAUKHMAN, V.A. (Moskva); LOPSHITS, A.M. (Yaroslavl'); SERGUSHOV, S.A. (Yaroslavl'); GOTMAN, E.G. (Pechora); VETROV, K.V. (Putintsevo, Vostochno-Kazakhstanskoy obl.); MIKHELEVICH, Sh.Kh. (Daugavpils); SKOPETS, Z.A. (Yaroslavl'); RYBKOV, L.M. (Yaroslavl'); CHEGODAYEV, A.I. (Gavrilov-Yam)

Problems. Mat.v shkole no.6:85-92 N-D '62. (MIRA 16:1)
(Mathematics--Problems, Exercises, etc.)

ISAKOV, A.A.; GOLDOVSKIY, Ye.A.

Bookbinding cloth with latex-based coating. Leg. prom. 18
no.9:29-30 S '58. (MIRA 11:10)
(Bookbinding--Materials, etc.)

ISAKOV, A.B., inzhener

Drawing specifications for blueprints used in machinery design.
Standartizatsiia no.3:68-72 My-Je '55. (MLRA 8:10)
(Blueprints) (Machinery--Design)

AUTHOR: Isakov, A.B., Engineer,

28-58-3-19/39

TITLE: Shortcomings in the Project for the Standardization of Drawing (Nedostatki proyekta standartov na sistemu chertezhnogo khozyaystva)

PERIODICAL: Standartizatsiya, 1958, Nr 3, pp 59-61 (USSR)

ABSTRACT: The author criticizes the project for the drawing-system standard ("SChKh") which has been issued in draft form for discussion, and states that the authors of the project have not solved the fundamental problem. The critical remarks concern the suggested new form of specifications, indications of dimension limits, conventional signs for materials, etc. In the author's opinion, these suggestions introduce more complications and do not eliminate auxiliary reference tables, without which conventional signs cannot be understood. He stresses that a drawing must be made in such a way as to be usable at any other plant with a minimum of additional explanatory material. Repetitions of indications must be avoided. There are 2 figures.

Card 1/1

1. Drafting--Standards

Isakov, A. I.

DANIN, I.S.; KLIMOV, V.A.; BRODSKIY, L.N.; ISAKOV, A.I.

Introducing standards of tolerance and fitting at the Kharkov
furniture combine. Der. i lesokhim.prom.3 no.11:19-21 № '54.
(MLRA 7:12)

1. Khar'kovskiy mebel'nyy kombinat (for Danin, Klimov & Brodskiy)
2. UkrNIIMOD (for Isakov)
(Kharkov--Woodwork--Standards)

ISAKOV, A.I.

Automatizing the control of linear dimensions of wooden parts.
Der.prom.5 no.7:8-12 J1 '56. (MIRA 9:9)

1.Ukrainskiy nauchno-issledovatel'skiy institut mekhanicheskoy
obrabotki drevesiny.
(Measuring instruments) (Automatic control)

S/112/59/000/012/061/097
AO52/A001

Translation from: Referativnyy zhurnal, Elektrotehnika, 1959, No. 12, p. 167,
25063

AUTHOR: Isakov, A.I.

TITLE: Precision Finishing Automatic Control of Hewn Parts

PERIODICAL: Sb. statey po avtomatiz. derevoobrabat. proiz-v, 1957, No. 4, pp.
54-60

TEXT: A description of an installation is given, which has been developed by UkrNIIMOD and introduced in the automatic line of the Kiyev Furniture Factory imeni Bozhenko. The installation makes possible to control the precision of machining parts on planers within GOST 6449-53 tolerance. Electrocontacting pick-up is used as a measuring element. When a dimension is beyond the tolerance this or that signal lamp flares up and a stamp is put on the defective part. If the signal continues during 12-15 seconds the machine is stopped automatically. There are 3 illustrations. ✓

A.N.B.

Translator's note: This is the full translation of the original Russian abstract.

Card 1/1

ISA KOV, A. I. inzh.

Development and use of automatic lines of woodworking machinery.
Der.prom.6 no.12:10-13 D '57. (MIRA 10:12)

1. Ukrainskiy nauchno-issledovatel'skiy institut mekhanicheskoy
obrabotki dereva.

(Woodworking machinery)

ISAKOV, A.I., Cand Tech Sci — (diss) "Automation ^{of} ~~the~~ control
of the precision of ^{the machine of} ~~processing~~ parts on automatic ~~mass~~
~~production~~ machine ^{tool} lines in ~~processing~~ ~~wood~~." Len, 1959,
24 pp with diagrams (Min of Higher Education USSR. Len Order
of Lenin Forestry ^{Engineering} Acad in S.M. Kirov) 150 copies (KL, 28-59, 127)

- 61 -

ISAKOV, A.I.; PARTENOV, P.K.

Automatically controlled unit for precision manufacturing of mortises. Der.prom. 9 no.2:5-7 P '60. (MIRA 13:6)

1. Ukrainskiy nauchno-issledovatel'skiy institut mekhanicheskoy obrabotki drevesiny.
(Automatic control) (Woodworking machinery)

ISAKOV, A.I., kand.tekhn.nauk; POZNAYEV, A.P., inzh.

Automatic device for the inspection and sorting of parquet floor
boards. Der.prom. 11 no.4:6-8 Ap '62. (MIRA 15:4)

1. Ukrainskiy nauchno-issledovatel'skiy institut mekhanicheskoy
obrabotki drevesiny.
(Woodworking machinery) (Automatic control)

ISAKOV, A. I., kand. tekhn. nauk; POZNAYEV, A. P., inzh.; KORZHUK,
G. K., inzh.

Automatic device for controlling and sorting panel parts and
slabs. Der. prom. 12 no.2:7-10 F '63. (MIRA 16:4)

1. Ukrainskiy nauchno-issledovatel'skiy institut mekhanicheskoy
obrabotki drevesiny.

(Hardboard) (Sorting devices)
(Automatic control)

ISAKOV, A.I., kand.tekhn.nauk; POZNAYEV, A.P.; KORZHIUK, G.K.

Quality of particle board. Bum. i der. prom. no.2:32-36 Ap-Je '63.
(MIRA 17:2)

1. Ukrainskiy nauchno-issledovatel'skiy institut mekhanicheskoy obra-
botki drevesiny.

ISAK, V., Afanasy Ivanovich, kand. tekhn. nauk; MANZHOS, F.S.,
prof., reitsenzent; MAKOVSKY, N.V., prof., red.

[Automation of the quality control of parts made of wood
and wood plastics] Avtomatizatsiya kontrolya kachestva
detalov iz drevesiny i drevesnykh plastikov. Moskva,
Izdatel'stvo promyshlennosti, 1965. 263 p. (MIRA 18:6)

ISAKOV, A.I., kand. tekhn. nauk; KHOKHLYUK, S.S.; DEREVYANKO, N.I.

Automatic regulation and control of the conditions of panel
veneering. Bum. i der. prom. no.3:3-8 J1-S '65. (MIRA 18:9)

ISAKOV, A. I., KURIN, I. O., SHAFIRO, F. S., SHIRMAN, A. V., and KURIN, I. V., and SUTCHIN, A. A.

"A Neutron Spectrometer Based on Measuring the Slowing-Down Time of Neutrons in Lead," a paper presented at the Atoms for Peace Conference, Geneva, Switzerland, 1955

ISANOV, A. I., MURIN, I. D., LEUFOKOYEV, S. A., FRANK, I. A., SHILIN, I. D.,
SHTRAMUK, and ANTONOV, A. V.

122
"A Study of Neutron Diffusion in Beryllium Graphite and Water by the
Impulse Method," a paper presented at the Atoms for Peace Conference,
Geneva, Switzerland, 1955

ANTONOV, A.V.; ISAKOV, A.I.; MURIN, I.D.; NEUPOKOYEV, B.A.; FRANK, I.M.;
SHAPIRO, F.L.; SHTRANIKH, I.V.

[Neutron diffusion in beryllium, graphite, and water, studied
by the pulse method] Issuchenie diffusii neutronov v berillii,
grafite i vode impul'snym metodom. Moskva, 1955. 27 p.
(MIRA 14:7)

(Neutrons—Scattering) (Beryllium) (Graphite)

Isakov, A.I.

BERGMAN, A.A.; ISAKOV, A.I.; MURIN, I.D.; SHAPIRO, F.L.; SHTRANIKH, I.V.;
KAZARNOVSKIY, N.V.

[Neutron spectrometer to measure retardation of neutrons in lead]
Neitronnyi spektrometr po vremeni zamedeniya neitronov v svintse;
doklady, predstavlenyye SSSR na Mezhdunarodnuyu konferentsiyu po
mirnomu ispol'zovaniyu atomnoi energii. Moskva, 1955. 30 p.
[Microfilm] (MLRA 9:3)

(Neutrons) (Spectrometry)

"Atomic Energy," by A. I. Isakov, Physics Institute imeni
P. N. Lebedev, Academy of Sciences USSR, Nauka i Zhizn',
No 10, Oct 56, pp 1-6

Various types of atomic batteries are described in a popular account.

In one type, radioactive isotopes ionize gas atoms between electrodes made of two different metals. Among the gas fillers tested was a mixture of argon or krypton with gaseous tritium, a combination which yielded a voltage of 1.1-1.9 volts.

Another type of battery combines a beta radiator with a semiconductor rectifier. The battery produces a voltage of 0.25 volt and has a lifetime of several weeks.

A battery utilizing the thermal energy of radioactive decay acting on a thermocouple is also described.

"There are many other projects dealing with the direct transformation of nuclear energy into electrical energy with the help of atomic batteries. In one of these, a voltage up to 20 volts was realized."

These batteries are used in experiments and in some instruments, and "in the near future" will permit the utilization of the great amount of gamma radiation wasted in nuclear reactors.

SUM. 1305

ISAKOV, A. I.

Distr: bE3d
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8
1-RML

19
ON THE REACTION $He^+ + D_2$ FOR THE
EXCITATION OF THE D_2^+ ION
BY THE He^+ ION. A. I. ISAKOV,
Moscow, U.S.S.R. Translated
from *Zh. Fiz. Khim.* 1978, 52, 1, 1-4.

The reaction of the He^+ ion with the D_2 molecule is studied by the
method of the He^+ ion beam. The results of the experiment are compared
with the data of the He^+ ion beam method. It is shown that the
predominance of the production of an D_2^+ ion, excited
below the bond energy of the neutral D_2 molecule, concerning
the existence and properties of such a level are rather con-
tradictory. An extrapolation of the state characteristics of
 He^+ from the state characteristics of neutral He would
lead one to expect that the first excited level of He^+ ought
to have a moment (um) of 1⁻ or 2⁻, but not 0⁻. The force
of this statement cannot be overestimated, inasmuch as it is
not based on any quantitative theory. An elucidation of
the mechanism of the reaction proposed by the following two pro-
cesses: 1) the collision of the He^+ ion with the D_2 molecule
and 2) the collision of the He^+ ion with the D_2 molecule
is shown. A semiempirical approach to the theory of this
reaction is shown.

100

ISAKOV, A. I., and POPOV, Yu. P.

"Cross Section for the He^3 (n,p) Reaction for Neutron Energy up to 25 kev, and Excited State of He^4 ," a paper submitted at the International Conference on the Neutron Interactions with the Nucleus, New York City, 9-12 Sep 57.

Abstract available in C-3,800,344

ISAKOV, A.I.

BERGMAN, A.A., ISAKOV, A.I., POPOV, Yu.P., SHAPIRO, F.L.

"Characteristics of a Lead Slowing Down Time Spectrometer and Measurement of Cross Sections for the (n, γ) Reaction,"

Lebedev Physical Inst. of Acad. Sci. USSR

paper submitted at the A-U Conf. on Nuclear Reactions in Medium and Low Energy Physics, Moscow, 19-27 Nov 57.

ISAKOV, A.I., BERGMAN, A.A., POPOV, Yu.P., SHAPIRO, F.L.

"Measurements of the Energy Dependence of the Cross Section for the He^3
(n.p.); Li^6 (N, α); B^{10} (n, α); N^{14} (N, p) Reactions,"

(Lebedev Physics Institute, Acad. Sci. USSR)

paper submitted at the All-Union Conf. on Nuclear Reactions in Medium and Low
Energy Physics, Moscow, 19-27 November 1957.

ISA KOV, A.I.

BERGMAN, A.A.; ISAKOV, A.I.; POPOV, Yu.P.; SHAPIRO, F.L.

Measurements with neutron spectrometer based on the slowing-down time in lead. Excited level of the He^4 nucleus [with summary in English]. Zhur. eksp. i teor. fiz. 33 no.1:9-16 J1 '57. (MLRA 10:9)

1. Fizicheskiy institut im. P.N. Lebedeva Akademii nauk SSSR.
(Nuclear reactions) (Neutrons) (Helium--Isotopes)

ISAKOV, A. I.

AUTHOR BERGMAN, A. A., ISAKOV, A. I., POPOV, Yu. P., SHAPIRO, F. L. 56-7-2/66
 TITLE Measurements with a Slowing-Down-Time Neutron Spectrometer Employing
 Lead-Excited Level of the He⁴ Nucleus.
 (Issledeniya s neytronnym spektrometrom po vremeni zamedleniya v
 svints. Vozbuzhdeniye yadra He⁴ - Russian)
 PERIODICAL Zhurnal eksperiment. i. teoret. Fiziki, 1957, Vol 33, Nr 7, pp 9-16 (U.S.S.R.)
 ABSTRACT Investigations carried out in connection with neutron reactions with
 a neutron spectrometer gave the following results:
 1) Fe(n,γ) Resonance was found at E_R=1200±100 eV
 2) Pb(n,γ) Resonance was found at E_R= 1700±150 eV and 2800±200 eV.
 3) The cross section course of the reaction B¹⁰(n,α) deviates by 5-
 -10% from the 1/v course. In B¹¹ a resonance with E_R~250 keV, Γ_α~
 ~400 keV, Γ_n~200 keV, J=5/2+ or 7/2+ was found.
 4) The deviation of the course of the cross section of the reaction
 Li⁶(n,α) from the 1/v course is below 5%.
 5) The deviation of the course of the cross section of the reaction
 He³(n,p) from the 1/v course is considerable, which fact can be explai-
 ned only by the presence of an excited state in He⁴. The parameters of
 this level are either J=1+, E_R~200 keV, Γ_p~200 keV or J=0+, E_R~500 keV
 Γ_p~1200 keV. (2 tables, 5 illustrations, 4 Slavic references)
 ASSOCIATION Physical Institute "P.N. Lebedev" of the Academy of Sciences of the USSR
 (Fizicheskiy institut im. P.N. Lebedeva Akademii nauk SSSR)
 SUBMITTED 22.1.1957
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Isakov, A.I.

AUTHORS: Antonov, A.V., Bergman, A.A., Isakov, A.I.,
Murin, I.D., Neupokoyev, B.A.

89 -1-6/18

TITLE: The Investigation of the Slowing-Down of Neutrons in Graphite and Heterogeneous Uranium-Graphite-Systems by the Momentum Method
(Issledovaniya zamedleniya neytronov v grafite i v uran-grafitovoy geterogennoy sisteme s pomoshch'yu impul'snogo metoda).

PERIODICAL: Physics and Thermotechniques of Reactors (Fizika i teplotekhnika reaktorov), Supplement Nr 1 to Atomnaya energiya, 1958, (USSR)

ABSTRACT: On the strength of experimental results the following may be said about the time needed for neutron slowing-down:
During the first 80 to 90 μ s slowing-down of neutrons in graphite takes place as a consequence of elastic collisions with free carbon nuclei. After this time interaction between neutrons and the crystal lattice of graphite begins. It may be assumed that after about 160 μ s the shape of the neutron spectrum nearly attains Maxwell's shape $M(T,E)$, which corresponds to a temperature $T(t)$ at that moment. In the further course of events the difference $T(t) - T_p$ decreases experimentally.

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$$T(t) - T_p \approx e^{-\beta t}$$

The Investigation of the Slowing-Down of Neutrons in
Graphite and Heterogeneous Uranium-Graphite-Systems
by the Momentum Method

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The temperature T at the beginning of this phase is $850-900^{\circ} \text{K}$ and the quantity $1/\beta = 200 \pm 25 \mu\text{s}$. In the concluding phase energy exchange between the neutrons and the medium is about three times as slow as in a monoatomic gas with the mass number 12.

The theoretical value of $1/\beta$ computed according to ref. 12 is $190 \mu\text{s}$, which agrees well with experimental values. There are 5 figures, 2 tables and 12 references, 8 of which are Slavic.

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1. Neutrons-Velocity
2. Neutrons-Motion

SOV/115-59-7-3/33

9(2)

AUTHORS: Isakov, A.I., Parfenov, P.K.

TITLE: An Electrical Contact Transducer Installed in a Dial Indicator

PERIODICAL: Izmeritel'naya tekhnika, 1959, Nr 7, pp 4-6 (USSR)

ABSTRACT: The authors suggest an electrical contact transducer installed in a dial indicator of the plant "Krasnyy instrumental'shchik". A diagram of the indicator mechanism is shown in fig.1. A 10 mm shift of the measuring rod results in one full turn of the gears z_1 and z_2 . Each tooth of the gears z_1 and z_2 corresponds to a certain position of the measuring rod, because of the rigid mechanical connection. In this way an electrical pulse may be obtained, caused by the closing of contacts at a previously fixed position of the measuring rod. For this purpose, the moveable parts of contact pairs must be fastened on the shafts of gears z_1 and z_2 , while the stationary parts must be mounted on the housing so that they can be adjusted. Fig. 2 shows the seating of the contact disc on the shaft of the gear z_2 . The contact disc is made of plastics and contains a brass contact ring. The contacts spring is made of beryllium bronze and terminates in a silver contact

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An Electrical Contact Transducer Installed in a Dial Indicator

point. Fig.3 shows the mounting of the contact system on the shaft of the gear z_1 . Fig.4 shows the rear cover of the pick-up and the mounting of the current feed contact. The rear cover of the indicator was replaced by a plexiglass plate on which the feed contact and the two limiting contacts were mounted. The feed contacts slide on the lateral surfaces of the two contact discs. The authors further describe a device designed for testing the experimental transducer models. The circuit diagram of the test device is shown in fig.5. A dodecahedral disc of 100 mm diameter was mounted on a RD-09 electric motor. The indicator transducer to be tested was installed in such a way that the rotation of the disc moved the measuring rod. The load on the electrical contacts consisted of two RSM-1 relays which were connected to signal lamps and one MKU-48 relay. The current measured upon closing of the contacts amounted to 18 milliamps and did not change during the tests. The contact resistance increase did not exceed 20% of the initial value and remained within the range of 0.25-0.030 ohms after 500,000 contact closures. The stability of the transducer setting was kept constant during the entire test period and

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An Electrical Contact Transducer Installed in a Dial Indicator

did not change more than ± 0.02 mm which remains within the certified indicator error of ± 0.025 mm. The application of self-cleaning slide contacts does not require periodic cleaning of contacts. There are 4 diagrams and 1 circuit diagram.

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B006/B059

21.7100

AUTHORS: Yerozolimskiy, B. G., Shkol'nikov, A. S., Isakov, A. I.

TITLE: Use of a Pulsed Neutron Source for Investigations in
Petroleum Boreholes

PERIODICAL: Atomnaya energiya, 1960, Vol. 9, No. 2, pp. 144 - 145

TEXT: The present "Letter to the Editor" contains details on theory and results of model experiments with miniature accelerating tubes serving as pulsed neutron sources for radioactive core sampling of boreholes. The simplest method of rock sampling is based upon measurement of the time dependence of thermal neutron density in the rock, i.e., determination of neutron lifetime in the rock. This method is suitable for determining mineral oil or water in a seam. If, for example, a sandy layer contains 20% water with 200g/l of dissolved salts, then the thermal neutron lifetime τ in such a medium is 250 μ sec, and 570 μ sec if this sandy layer contains 20% of mineral oil. This fact is used to determine the position of an oil-water boundary layer by means of constant neutron sources. In the case of such neutron sources, the measured neutron distribution around

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Use of a Pulsed Neutron Source for
Investigations in Petroleum BoreholesS/089/60/009/002/019/019/XX
B006/B059

the source is proportional to the lifetime in the medium, whereas in the case of pulsed sources, the measured function $n(t)$ is related to τ by a factor $e^{t/\tau}$, i.e., the relationship between measured quantity and τ is much more distinct than in the case of measurements in a steady field. Measurements with a pulsed neutron source were made on rock-bed models using the methods described in Refs. 1 and 8. Fig. 1 shows the curves of measurements (neutron density versus time) made in borehole models of concrete, sand, paraffin, and salts. A BF_3 filled proportional counter served as a thermal neutron indicator. The pulses from the counter were fed into a 100-channel time analyzer. A deuteron acceleration tube with a tritium target was used as a neutron source (14 Mev), giving 5- μ sec neutron pulses at a frequency of 300 cps. Fig. 2 shows the model with source and counter. The results of the investigation showed that between the "petroleum" and the "water" containing model (sand+paraffin and sand+paraffin+salts, respectively) the recording of the indicator at $t = 800 \mu$ sec differed by the ten-fold. In contrast to this, the usual methods of neutron core sampling show a difference of only 40 to 50%. The difference is in agreement with theoretical estimates. The results

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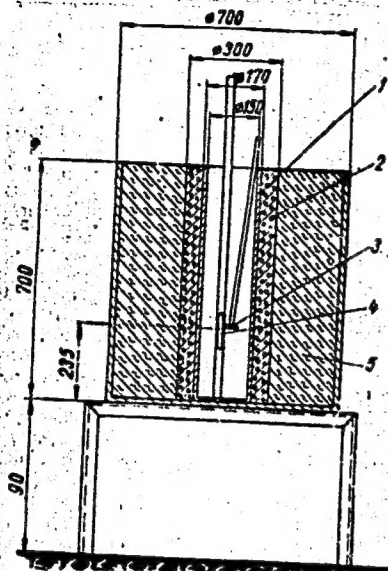
Use of a Pulsed Neutron Source for
Investigations in Petroleum Boreholes

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show that this new method is very convenient in determining the water -
petroleum boundary. The authors thank G. N. Flerov for discussions and
stimulations, as well as I. M. Frank and F. L. Shapiro for assistance.
There are 2 figures and 8 references: 5 Soviet and 3 US.

SUBMITTED: July 15, 1959

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Legend to Fig. 2: 1 - drive pipe, 2 - cement ring, 3 - target, 4 - counter,
5 - sand+paraffin (and salt) mixture.

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ISAKOV, A.I.; POPOV, Yu.P.; SHAPIRO, F.L.

Measuring the energy dependence of the radiative capture of
neutrons in iron, silver, and gold in the energy range up to
30 Kev. Zhur.eksp.i teor.fiz. 38 no.3:989-992 Mr '60.
(MIRA 13:7)

1. Fizicheskiy institut imeni P.N.Lebedeva Akademii nauk SSSR.
(Neutrons—Capture)